Preliminary Datasheet



WRTR-501

Wireless-N AP / Router

Up to 10X Speed and 4X Range

Up to 300Mbps data rate,
SparkLAN WRTR-501 is IEEE 802.11n draft 2.0 compliant. It can deliver 6x better performance than normal 802.11g while fully backward compatible with 802.11g gears. The Wireless-N AP / Router integrated MIMO technology, which can enhance coverage range and throughput and save the cost to purchase additional wireless equipments to deploy WLAN environment. The Wireless-N AP / Router achieves incredible data rate of up to 300Mbps, which can allow you to enjoy high speed internet access for data, video, and voice at home and office. It is designed to stream HD video such as high-definition video, VoIP phone calls, movies, music, pictures, and online games.

Convenient Router and AP mode control
SparKLAN simplifies the way to change between Router and AP modes with external switch.

Easy to set up security with WPS button
By pressing the WPS button on the router, you can set up security within minutes. To maximize your network security and privacy, SparkLAN Wireless-N AP / Router incorporates 64/128 bit WEP Encryption, WPA, WPA2, simple firewall, and QoS, which can filter external user and prevent illegal attacking. NAT doubles your firewall and safeguards your network from internet hacker.

Product Highlights

- IEEE802.11n draft compliant
- Delivers up to 300 Mbps data rate
- Up to 10X speed and 4X range
- Designed to stream movies, music, photos, HD video, VoIP phone call, and large file
- Easy to set up security with WPS button
- External switch to change between Router and AP Modes

Features

- MIMO technology
- Backward compliant with 802.11b/g
- Web-based management
- Advanced security: 64/128bit WEP, WPA, WPA2, simple firewall, MAC address filtering, WPS
- Support NAT to protect user against hackers

SPECIFICATIONS

Hardware	
Chipset	Ralink
Interface	WAN 1x 10/100Mbps port LAN: 4x10/100Mbps port
LED Indicators	Power, Security, Wireless, Router, DIAG, Internet, LAN1, LAN2, LAN3, LAN4
Antenna	Three external 2dBi RSMA detachable antenna
AP/Router mode control	It can be switched from the router mode to AP mode
Radio Characteristics	
Standard	IEEE draft 802.11n, 802.11b/g, 802.3, 802.3u
Frequency Band	**802.11b** ISM band 2.400 ~ 2.484GHz (subject to local regulations) **802.11g** ISM band 2.400 ~ 2.484GHz (subject to local regulations) **802.11n draft** ISM band 2422 – 2452MHz (channel BW=40MHz) 2400 – 2483.5MHz (channel BW=20MHz)
RF chain	2T3R for HT20,HT40, 1T3R for 802.11b/g mode
Spreading	**802.11b**：Direct Sequence Spread Spectrum (DSSS) **802.11g**:Orthogonal Frequency Division Multiplexing (OFDM) **HT20**：Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO) **HT40**：Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO)
Modulation	**802.11g** G64 QAM, 16 QAM,QPSK, BPSK **802.11b** GCCK,DQPSK,DBPSK **HT20,HT40** 64 QAM, 16 QAM,QPSK, BPSK Data
Data Rate	**802.11b** 11,5.5, 2, 1 Mbps per channel802.11g 54, 48, 36,24,18,12, 9, 6 Mbps per channel **HT20** 144, 130, 115, 86, 57, 43, 28, 14 Mbps **HT40** 270, 240, 180, 120, 90, 60, 30Mbps
Receive sensitivity	**802.11g (3RX)** Nominal Temp Range: - 6Mbps @ -91dBm, typical, +/-2dBm - 54Mbps @ -72dBm, typical, +/-2dBm **802.11b** Typ. -85dBm@11Mbps, +/-2dBm Typ. -92dBm@1Mbps, +/-2dBm **HT20(3RX)** MCS=0 -87dBm, +/-2dBm MCS=15 -67dBm, +/-2dBm **HT40(3RX)** MCS=0 -85dbm, +/-2dBm MCS=15 -64dBm, +/-2dBm
Power Consumption	**802.11b** Continue TX: 620@3.3V Continue RX: 340@3.3V **802.11g** Continue TX: 640@3.3V Continue RX: 340@3.3V **HT20** Continue TX: 660@3.3V Continue RX: 340@3.3V **HT40** Continue TX: 680@3.3V Continue RX: 340@3.3V
Output Power	**802.11g** 15dBm @ 54Mbps **802.11b** 17dBm@11Mbps **HT20** 13dBm@144Mbps **HT40** 11dBm@270Mbps
Software Features	
Basic	● DHCP client/server ● NAT, PPPoE Client ● Dynamic DNS
Security	● 64/128 WEP ● 802.1x ● MAC address filtering ● SPI firewall ● WPA, WPA2, TKIP, AES ● Pre-WPS
Management	Web-based management
Environmental Specifications	
Dimensions	135*120*23mm
Weight	72g
Temperature	Operating: 0ºC to 55ºC Storage: -20ºC to 80ºC
Humidity	90%,(non-condensing)
Power Supply	
Output	DC 12V, 1A
Certification	
FCC, CE	
Package Contents	
Wireless-N AP Router	
CD-ROM (User Guide, Utility, QIG, User Manual)	Multi-Language Quick Installation Guide
Power adapter	RJ45 Cat.5 UTP cable

Specifications are preliminary and subject to change without notice